The Big Five Personality Traits: A Primer for Senior Leaders

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Note: In an effort to promote self-awareness, it is suggested that readers consider completing a Big Five Personality Survey and print out the results prior to reading this Primer. Readers can accomplish this by going to www.personalitytest.net/, clicking on the NEO, and scrolling down to the short version (120 questions).

I recently gave a presentation to an audience of about one hundred "corporate-types" and posed the question, "How many of you are familiar with the Big Five Personality Traits?" I was somewhat surprised when no hands were raised. With my curiosity somewhat piqued, I then asked, "How many of you are familiar with the Myers Briggs Type Indicator (MBTI) and even know your type?" I was again surprised when about 95% of the hands went up. As a behavioral scientist, my heart sank as I had to acknowledge that the military's unjustified preoccupation with MBTI is most likely replicated in the corporate world. People seem to like MBTI—probably because it is interesting, it inspires reflection, and the sixteen MBTI types are all upbeat and harmless. Unfortunately, as University of Pennsylvania psychologist Adam Grant asserts:

> If we're going to divide people into categories, those categories ought to be meaningful. In social science, we use four standards: are the categories reliable, valid, independent, and comprehensive? For the MBTI, the evidence says not very, no, no, and not really.[1]

The purpose of this paper is to convince you to replace your MBTI-based personality identity—a measure that is described by one personality expert as "an elaborate Chinese fortune cookie"[2]—with a comprehensive, empirically supported, and valid description of personality—The Big Five Personality Traits.

Why should you care about a taxonomy of personality traits? Well, the much discussed Human Domain, the domain where the Army maximizes its core strengths, is full of, well, humans. Naturally, we would all like some understanding of what makes people tick, to include ourselves. Rather than approach this task in a random manner, however, why not take advantage of fifty years of research by applying the Big Five taxonomy of traits to understand personality?[3]

The Big Five traits have strong predictive validity. They provide an accurate view of human nature. Whether you are choosing who to put on your team, determining who to trust with valuable resources, deciding who to put into a leadership position, or assigning a task requiring innovative thinking, the Big Five assess meaningful categories of personality that can help tackle these decisions (not to mention the self-awareness it provides you).

The Big Five Personality Traits

Each of us has a unique personality. Statistical analysis of years of personality test information along with a detailed conceptual examination has led to the identification of five overarching personality traits or domains (commonly called The Big Five): Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (often remembered with the acronym OCEAN).[4] For the purpose of this Primer, think of personality traits as a set of relatively stable innate structures and acquired dispositions that provide a clue about how a person is likely to respond to their environment. Personality traits are tendencies, not absolute determinants. Thus, while people high in the personality trait of Agreeableness tend to be trusting, they normally will not give their car keys to a stranger. Similarly, people who are low in the trait of Neuroticism rarely worry but will still be anxious when their child undergoes a risky surgery.

These traits were mainly derived using a statistical process called factor analysis. Factor analysis looks across many items (in the case of personality research, adjectives describing people) to see which items are correlated and which are not with the intent of reducing a large number of items to several factors. For instance, during each academic year Army War College students fill out end-of-course surveys to provide feedback to the faculty. Although there might be 40 questions on the survey, a factor analysis would assess the inter-correlations among questions to likely show that the survey really measures three factors: (1) Did you like the course content, (2) Did you like your faculty, and (3) Did you like the required paper? By using factor analysis to derive the personality traits, the traits are largely independent.[5] Therefore, a high score for one of the Big Five traits does not imply a corresponding high or low score for any of the other Big Five traits.

For each of the Big Five traits, subscales measure specific traits, usually called facets because they represent a “side” of the larger trait. Each Big Five trait has six facets (e.g., Conscientious has competence, order, dutifulness, achievement striving, self-discipline, and deliberation).[6] The facets may not be related to just one trait. Thus, while “competence” is a facet of Conscientiousness, it can also be somewhat related to Extraversion. Generally, an individual’s six facets on a Big Five trait will be highly correlated, but not always. For Conscientiousness, some individuals can be dutiful, but not orderly; or competent, but not deliberative. But in general, people high in Conscientiousness are probably high in each of the six facets aligned with Conscientiousness.

Now think back to your “Introduction to Statistics” course. The Big Five traits are normally distributed in a bell curve with 50 as the mean. Rating everyone on Conscientiousness with 0 being extremely low and 100 being extremely high, about a third of the population would score in the midrange (between 45 and 55), a third would score below 45 (i.e., low in Conscientiousness) and the high Conscientiousness people would score above 55 (about a third of the population).

OCEAN – The Traits

Openness

Openness is not about self-disclosure as in telling the person in the office next to you that you have always had a secret crush on Walter Matthau. It is about receptivity to new things. The six facets of Openness are: *fantasy, aesthetics, feelings, actions, ideas, and values*. When you envision someone high in Openness, picture an artist. Open people enjoy new restaurants, love to travel, routinely reconsider their values and are intellectually curious. Low openness folks are not narrow-minded or intolerant, they just prefer the familiar; they also tend to be moralistic. High Openness people tend to be liberal; low Openness individuals are usually more conservative. Although Openness is the only Big Five trait related to intelligence, it is clearly a separate construct.[7] I can think of many brilliant engineer friends who go to the same restaurant every week, do not own a passport, and would rather see a dentist than a Broadway show. Some research shows that low Openness is positively related to productivity, which may explain why many military officers are typically low in this trait—mission accomplishment is the sine qua non for a military officer.[8] Low openness in military officers most likely relates back to self-selection. Picture a recruiter standing in front of a thousand 18 year-olds and saying, "I need ten of you (i.e., the 1% of America that currently serves in the military) to volunteer to wear the same thing every day, march in formation to meals, and live in a trench for months. When I blow a whistle, you will climb a ladder out of the trench and run across this area known as 'no man's land' to kill those bad guys. Who volunteers?" You can probably understand why those in the military (and also police) tend to be low in Openness. In this scenario, the military does not need a bunch of rebellious, artsy-types to question the order to attack. However, low Openness may present problems to the military as it strives for agile, adaptive, and innovative leaders, especially at senior levels.

Conscientiousness

Conscientiousness is driven by impulse control and conformity. Again, the six facets of Conscientiousness are: *competence, order, dutifulness, achievement striving, self-discipline, and deliberation*. Conscientiousness is often used as a proxy for integrity on employment tests. People high in Conscientious are confident, well-organized, disciplined, and driven. Needless to say, many military officers are high in Conscientiousness. I have a mental image of a battalion executive officer decades ago who used to require that the companies in our battalion line up their vehicles in the motor pool with a 200-foot string; I'd say he maxed out on the facet of orderliness. Low Conscientiousness individuals are often described in letters to Dear Abby from mothers-in-law who question how to: "…get Frank off the couch in the basement where he plays video games all day and into a job to support his wife and child?"

Extraversion

The core of Extraversion is positive emotionality. The six facets of Extraversion are: *warmth, gregariousness, assertiveness, activity, excitement seeking, and positive emotions*. Extraverts are friendly, outgoing, and comfortable taking charge. They go about their life at a vigorous pace. People low in Extraversion tend to be quiet, comfortable being alone, and are rarely described as ebullient. Military leaders who are classified as introverts in MBTI are often surprised to see that they are rated moderate to high in Extraversion on the Big Five assessment. This should not be surprising. Although content to be quiet when given the option, military leaders are routinely assertive, full of energy, and are positive individuals. It is tough to be a battalion or squadron commander and be low in Extraversion.

Agreeableness

Agreeable people are unguarded, caring, humble, and gentle. The six facets of Agreeableness are: *trust, straightforwardness, altruism, compliance, modest, and tender-mindedness*. Individuals high in Agreeableness are deferent, believe that people are good and that their intent is genuine and transparent. People low in Agreeableness can be categorized as antagonistic, guarded, cynical, and tough-minded. While we all might prefer our subordinates to be high in Agreeableness, we also would probably prefer that our divorce lawyer be low.

Neuroticism

Neuroticism relates to psychological adjustment and emotional stability. The six facets of Neuroticism are: *anxiety, anger, depression, self-consciousness, impulsiveness, and vulnerability*. All of us are neurotic to some degree. People high in Neuroticism respond poorly to stress, are easily discouraged, experience negative moods, and worry a lot. People low in Neuroticism are calm, manage stress well, are slow to anger, and hopeful. As all traits have passed the evolutionary test of survival, it is not hard to imagine the value of the neurotic worry-wart standing at the entrance to the cave yelling at everyone to: “Stop drinking the juice made from grapes and smoking leaves from the tall plant and come over here with your weapon because I think I heard something.” Given the anger and moodiness components to high Neuroticism, it is also not a stretch to argue that people high in Neuroticism should be vigilant in monitoring their actions to ensure they do not exhibit behaviors associated with toxic leadership.

Why This Matters

Prior to the development of the Big Five, organizational researchers struggled to find personality traits that predicted performance and leadership success. They concluded that it was contextual—some traits mattered in some situations and some in others.[9] With the development of the Big Five taxonomy, the situation changed. Overwhelming research now supports the predictive ability of some of the Big Five traits to performance and leadership.[10] Most importantly, Conscientiousness has been shown

to be predictive of success in any job. As one researcher highlighted, “It is hard to conceive of a job where it is beneficial to be careless, irresponsible, lazy, impulsive, and low in achievement striving.”[11] Although not nearly as predictive, being low in Neuroticism is also significantly predictive of success in all jobs.[12] Extraversion predicts success in specific jobs only, such as police and sales.[13] Openness and Agreeableness, however, are not routinely predictive of success across any work environments. Finally, the impact of personality traits on work behavior is most noteworthy in jobs where the worker has a larger degree of autonomy—personality is not as predictive for the call-center employee as for the social worker.

In terms of predicting leadership effectiveness, Extraversion rises to the top of the traits. On average, assertive, high energy people tend to be better leaders. Conscientiousness is also a strong predictor. Being low in Neuroticism and high in Openness are also consistently related to effective leadership, but not to the degree of Extraversion and Conscientiousness.[14] In a study of senior leaders, Openness was a significant predictor of strategic thinking competency.[15] Although not as important at the tactical and worker-bee level, Openness appears to rise in importance as individuals move to senior leadership positions. Agreeableness, however, is not typically identified as a predictive trait of leadership effectiveness.

Studies show that at the group level, teams with high scores in Conscientiousness and Agreeableness, and low scores in Neuroticism tend to perform better than teams with lower average scores.[16] Additionally, teams with no members low in Conscientiousness have less conflict, better communications, and more workload sharing.[17] Teams with even one member low in Agreeableness or Extraversion, or very high in Neuroticism, tend to have lower performance, less cohesion, more conflict, weaker communications, and less workload sharing.[18] Interestingly, teams will often go out of their way to help a team member with a low IQ, but will deal with low Conscientiousness members by ignoring them.[19]

Some Surprises

Some readers may be surprised to learn that overwhelming research on the genetics of personality show that personality is about 50% inherited.[20] Trait variation can be broken down into three components: (1) heredity, (2) shared environment, and (3) non-shared environment.[21] The shared environment consists of all the influences that come from being in a specific family. The non-shared environment refers to anything outside the family environment that influences the personality. If you were surprised by the 50% inherited assertion, you will probably be more surprised to learn that there is remarkably consistent evidence that the shared environment (family life) contributes nothing in the variance of personality traits. The other 50% comes from the non-shared environment. Once you remove the impact of genes, family members are no more alike than people raised in different families.[22] This assertion is seen in fraternal and identical twins’ studies, but is most evident in adoption studies. As McCrae and Costa highlight:

> When biologically unrelated children are raised in the same family, they show no resemblance whatsoever in personality as adults. They may follow the same religion or speak with the same accent or prefer the same kinds of food, but they are no more alike in levels of Extraversion that two people plucked at random from the population.[23]

The high proportion of inheritability in personality traits leads to very stable traits in adults. There is more movement in childhood and adolescence (but much less than you might think),[24] but most people change their personality very little after age 30.[25] Significant personality change in adults can usually only be accomplished through years of engagement with skilled psychotherapists. There is a common saying in industrial psychology: "If you want people high in Conscientiousness and low in Neuroticism on your team, hire them." There are some long-term trends, however. As we age, we tend to become less neurotic, extroverted, and open. We also tend to exhibit higher levels of Agreeableness and Conscientiousness.[26]

Interestingly, women tend to be higher in Neuroticism and Agreeableness while men tend to be higher in assertiveness—a facet of Extraversion.[27] (My wife would claim that my assertiveness drives her to be more agreeable, which increases her Neuroticism.) Finally, research shows that the Big Five trait structure has been replicated across many countries and cultures.[28]

The stability of personality traits would suggest that organizations, to include the military, should assess the personalities of incoming personnel to target those high in Conscientiousness and low in Neuroticism. Additionally, it would make sense for the military to seek officers who are assertive and high energy. Using personality testing in human resource management decisions, however, raises a common criticism: faking. Individuals completing a personality assessment, especially if they believe the results will be used to make career decisions, will often respond with what they think the socially desirable answer is for each question. Within a day of the military attempting to screen recruits for Neuroticism, a website will surface recommending all new recruits respond "Strongly Disagree" to the statement "I am often anxious." Although consulting firms insist they have developed tests that can screen for faking, their claims are hard to confirm.

Concluding Thoughts

The goal of this paper was to introduce you to the Big Five Personality Traits and hopefully, over time, change the language of personality in the military from MBTI to the Big Five. MBTI is cute, entertaining, and easy, but not particularly useful. The Big Five Traits are psychometrically sound, have predictive validity, and are stable in adults. Given the stability of these traits, self-aware leaders should understand how their personality traits may guide their reaction to different situations and environments.

[1] Adam Grant, Goodbye to MBTI, the Fad That Won't Die," Huffington Post Business Online, September 18, 2013, available from *www.huffingtonpost.com/adam-grant/goodbye-to-mbti-the-fad-t_b_3947014.html*.
[2] Robert Hogan, *Personality and the Fate of Organizations* (New York: Psychology Press, 2007), 28.
[3] Robert R. McCrae and Paul T. Costa Jr., "Validation of the Five-Factor Model of Personality Across Instruments and Observers," *Journal of Personality and Social Psychology* 52, no. 1 (1987): 81-90.
[4] See Robert R. McCrae and Paul T. Costa Jr., *Personality in Adulthood: A Five-Factor Theory Perspective 2nd Edition* (New York: The Guilford Press, 2003) for an overview of the Big Five.
[5] McCrae and Costa , Personality in Adulthood, 51.
[6] All facet descriptions in this paper come from Paul T. Costa Jr. and Robert R. McCrae, "Domains and Facets: Hierarchical Personality Assessment Using the Revised NEO Personality Inventory," *Journal of Personality Assessment* 64, no. 1, (1995): 21-50.
[7] McCrae and Costa, Validation of the Five-Factor Model, 88.
[8] The low Openness assertion is based on informal data collection at the Army War College by the author and also based on assertions made in public forums by previous Army War College Commandants.
[9] Gary Yukl and David D. Van Fleet, "Theory and Research on Leadership in Organizations," Marvin D. Dunnette and Leaetta M. Hough, eds., *Handbook of Industrial and Organizational Psychology Volume 3,* (Palo Alto: Consulting Psychologists Press, 1992), 147-197.
[10] Murray R. Barrick, Michel K. Mount, and Timothy A. Judge, "Personality and Performance at the Beginning of the New Millennium: What do we know and Where do we go Next?" *International Journal of Selection and Assessment* 9, no. 1-2 (March/June 2001): 9-30.
[11] Ibid., 11.
[12] Ibid., 11.
[13] See Murray R. Barrick and Michael K. Mount, The Big Five Personality Dimensions and Job Performance: A Meta-Analysis, *Personnel Psychology* 44, (Spring 1991): 1 and Murray R. Barrick, Michael K. Mount, and Timothy A. Judge, "Personality and Performance at the Beginning of the New Millennium: What do we know and Where do we go Next?" *International Journal of Selection and Assessment* 9, no. 1-2 (March/June 2001): 22.
[14] Timothy A. Judge et al., "Personality and Leadership: A Qualitative and Quantitative Review, *Journal of Applied Psychology* 87, no. 4 (2002): 765.
[15] Lisa A. Dragoni et al., "Developing Executive Leaders: The Relative Contribution of Cognitive Ability, Personality, and the Accumulation of Work Experience in Predicting Strategic Thinking Competency," *Personnel Psychology* 64, (2001): 829-864.
[16] Murray R. Barrick et al., "Relating Member Ability and Personality to Work-Team Processes and Team Effectiveness," Journal of Applied Psychology 83, no. 3 (June 1998): 377-391.
[17] Ibid.
[18] Ibid.
[19] Jeffrey A. LePine et al., "Effects of Individual Differences on Performance of Hierarchical Decision Making Teams: Much more than g," Journal of Applied Psychology 82, no. 5 (October 1997): 803-811.
[20] Hogan, Fate of Organizations, 10.
[21] David C. Rowe, Genetics, "Temperament, and Personality," Robert Hogan, John A. Johnson, and Stephen Briggs, eds., *Handbook of Personality Psychology* (New York: Academic Press, 1997), 371.
[22] Ibid., 379.
[23] McCrae and Costa, Personality in Adulthood, 103.
[24] Timothy A. Judge et al., "The Big Five Personality Traits, General Mental Ability, and Career Success Across the Life Span," *Personnel Psychology* 52, no. 3 (Autumn 1999): 645.
[25] McCrae and Costa, Personality in Adulthood, 9.
[26] See Robert R. McCrae et al., "Age Differences in Personality Across Adult Life Span: Parallels in Five Cultures," Developmental Psychology 35, no 2 (1999): 466-477.
[27] Paul T. Costa Jr., Antonio Terracciano, and Robert R. McCrae, "Gender Differences in Personality Traits Across Cultures: Robust and Surprising Findings," *Journal of Personality and Social Psychology* 81, no. 2 (2001): 322.
[28] Judge et al., Personality and Leadership, 767.